UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

July 16, 2004

Mr. Roy A. Hoagland
Virginia Executive Director
Chesapeake Bay Foundation
1108 Main Street, Suite 1600
Richmond, VA 23219

Dear Mr. Hoagland:

Thank you for your letter of December 1, 2003, transmitting a "Petition of the Chesapeake Bay Foundation (CBF) to the United States Environmental Protection Agency (EPA) to amend, issue or repeal rules or take action to address nutrient pollution from significant point sources in the Chesapeake Bay Watershed (Petition)." EPA recognizes CBF as a valued and long-standing partner in our mutual efforts to restore the Chesapeake Bay. EPA and our partner states share your interest in substantially reducing nutrient pollution in order to restore the water quality of the Chesapeake Bay and the tidal tributaries as reaffirmed by the Executive Council of the Chesapeake Bay Program (CBP) in December 2003. This letter outlines the steps that EPA and its partners are taking to meet our mutual goal to place appropriate nutrient control requirements in National Pollutant Discharge Elimination System (NPDES) permits consistent with the Clean Water Act (CWA) and *Chesapeake 2000*. As discussed at our meeting on June 29, 2004, this letter is not a response to your Petition. Rather, we wanted to inform you of EPA's ongoing efforts, and to solicit your comments as EPA continues to consider the issues identified in your Petition.

Nutrient pollution is the most critical problem facing the Bay. We have made substantial progress in reducing the discharge of nutrients to the Bay from both point and nonpoint sources. In 1985, significant point sources discharged a total annual load of 11.8 million pounds of phosphorus. By 2002, their total annual discharge of phosphorus had decreased by 6.4 million pounds or 54%. Similarly, significant point sources discharged a total annual load of 96.4 million pounds of nitrogen in 1985. By 2002, their total annual discharge of nitrogen had decreased by 31.2 million pounds or 32%. As of 2002, approximately 46% of the total flow from all significant point sources, in the seven-state watershed, was being treated using nutrient reduction technology (NRT).

We know that progress to date is not nearly enough to restore water quality and the living resources of the Bay. Furthermore, point source reductions alone are not sufficient to achieve water quality standards. As of 2002, point sources represented approximately 21% of the total nitrogen and phosphorus load delivered to the Chesapeake Bay. This is why we are committed to other, unprecedented goals in order to achieve additional annual load reductions of 6.7 million pounds for phosphorus and 103 million pounds for nitrogen.

Progress has already been secured in the area of NPDES permitting of nutrients in the Bay watershed. Out of a total of 368 significant NPDES point sources of nutrients discharging to the Chesapeake Bay, 174 NPDES permits currently contain numeric effluent limits for phosphorus. For nitrogen, there are currently twelve NPDES permits with a numeric effluent limit. Many additional permits include monitoring provisions or reopener provisions for local nutrient controls and/or conformance with total maximum daily loads. While these NPDES requirements are in place, EPA acknowledges that NPDES permitting authorities need to establish additional controls to achieve the significant reductions necessary from point sources as identified in the tributary strategies. *(US EPA. 2003.* Setting and Allocating the Chesapeake Bay Basin Nutrient and Sediment Loads*, EPA 903-R-03-007. Chesapeake Bay Program Office, Annapolis, Maryland)*

As you know, our state partners, as well as a host of public and private organizations, play a critical role in the success of the Bay restoration effort. Their contributions include:

- Developing and implementing comprehensive tributary strategies for the targeted reduction of nitrogen, phosphorus and sediment;
- Proceeding to adopt water quality standards based upon EPA's recommended Water Quality Criteria for the Chesapeake Bay (the States of Delaware, Virginia and Maryland and the District of Columbia);
- Installing and operating NRT at the Blue Plains Sewage Treatment Plant (the District of Columbia);
- Creating a Chesapeake Bay Restoration Fund (Maryland);
- Leading the incorporation of total phosphorus limits into NPDES permits (Pennsylvania);
- Re-authorizing and appropriating $19.7 million for its Water Quality Improvement Fund (Virginia); and,
- Contributing to the development of EPA recommended criteria and refined uses for the Chesapeake Bay and subsequently to the nutrient cap load allocations through the CBP's Water Quality Steering Committee.

EPA has been taking a leadership role in adapting the CWA tools and authorities to meet the specific watershed-based goals of the CBP. We believe this effort has been both innovative and comprehensive and seeks to include the view of many stakeholders in the Bay restoration. EPA has created and leads the Chesapeake Bay Permitting Workgroup, which is a stakeholder involvement effort that includes the CBF. We have included with this letter a draft paper entitled 'EPA Region II and III NPDES Permitting Approach for Discharges of Nutrients in the Chesapeake Bay,' (Draft Permitting Approach) describing the expectations and actions that EPA believes will be most effective in establishing appropriate nutrient control requirements in NPDES permits.

In short, EPA's Action Plan, for point source nutrient controls, includes the following elements:

1. Creating and facilitating the CBP Permitting Workgroup to coordinate point source control consistent with state tributary strategies and address Bay specific NPDES issues such as flexibility in the expression of NPDES effluent limits;
2. Providing a forum for further discussion and oversight of the state tributary team allocation to individual point sources;
3. Developing EPA Criteria for water clarity, dissolved oxygen and chlorophyll *a* in the Chesapeake Bay and tidal waters and overseeing the state water quality standards' adoption processes in the tidal states;
4. Developing the Draft Permitting Approach outlining specific principles and guidelines for NPDES permitting (enclosed);
5. Developing a Model Watershed Permit for use by states and EPA and providing funding and technical assistance to promote its implementation as appropriate;
6. Working on state technical committees to define a technology-based option for nutrient control where the states have elected to pursue that route;
7. Developing guidance to permitting authorities on how to establish appropriate permit effluent limits for N and P that are expressed as an annual load for the Chesapeake Bay and tidal tributaries (enclosed);
8. Affirming the use of compliance schedules in permits consistent with applicable water quality standards and/or enforceable agreements to meet the permit requirements; and,
9. Convening a Blue Ribbon Panel to explore innovative approaches to secure funding to support the water quality restoration objectives of the CBP.

As you know, EPA developed refined aquatic life uses for the Chesapeake Bay and tidal tributaries as well as comprehensive water quality criteria to protect those uses based on the best scientific data currently available and in direct consultation with the states. EPA recommends that the Bay states adopt specific water quality criteria for dissolved oxygen, chlorophyll *a* and water clarity, along with the identification of specific underwater grass restoration goals for each segment of the Bay. The CBP used these refined uses and criteria as the water quality basis for setting and allocating the recommended nutrient and sediment cap load reductions.

The states are now actively engaged in proposing modifications to their respective Chesapeake Bay water quality standards based on the EPA recommended Bay aquatic life uses and criteria. The Bay states are on schedule to adopt new water quality standards in 2004 through 2005 consistent with the expectations of the CBP Executive Council. Delaware has completed its adoption of the recommended Chesapeake Bay aquatic life uses and criteria. Maryland and the District of Columbia expect to adopt final water quality standard modifications consistent with EPA's recommendations by the end of the calendar year. Virginia, which has a lengthier public participation and administrative process, is on track to adopt its revised water quality standards in 2005. The Clean Water Act provides that NPDES permits must contain limits that are as stringent as necessary to meet water

quality standards. The adoption of these new standards will improve the ability of the states and EPA to develop the most sound NPDES permit requirements for nutrients and sediments possible, which can go into effect at the earliest feasible date. EPA developed the enclosed Draft Permitting Approach to describe how NPDES permitting may best proceed.

The Draft Permitting Approach is consistent with Directive No. 03-02 "Meeting the Nutrient and Sediment Reduction Goals" adopted by the CBP's Executive Council at their December 9, 2003 meeting. This directed EPA to "assist the jurisdictions [states], working with stakeholders, to develop watershed permitting and contractual tools and strategies to control nutrient loadings to the Chesapeake Bay and its tidal tributaries. These tools and strategies should address cost-effectiveness, including nutrient trading, and promote state of the art technologies wherever possible." This Draft Permitting Approach encourages the respective NPDES permitting authority to consider capping the existing nutrient loads from the significant point sources. Following Maryland's adoption of revised water quality standards and EPA's approval, EPA's Draft Permitting Approach calls upon the states and EPA to incorporate nutrient control requirements into permits consistent with the applicable state tributary strategy allocations. For example, one way to achieve this would be to place the numerical cap loading for a facility, identified in the tributary strategy, directly into the NPDES permit as a numeric loading effluent limit.

As described in the Draft Permitting Approach, EPA intends to review significant NPDES permits, and reserves its discretionary authority to object to any NPDES permit that is not consistent with the requirements of the Clean Water Act. The Approach also recommends that any NPDES permit issued to new significant point sources of nutrients would also need to contain nutrient control requirements consistent with the applicable state tributary strategy. Therefore, to facilitate NPDES permitting of new facilities, the tributary strategies should contain explicit provisions for addressing new discharges through mechanisms like a load reserve for future growth, or by other allowances enabling a new facility to offset its added load by additional load reductions from other sources (e.g. trading procedure). The Draft Permitting Approach allows for the states to express NPDES permit limits for nitrogen and phosphorus, intended to protect the Chesapeake Bay and its tidal tributaries, as annual load limits, without the need to additionally express the limits as monthly, weekly, or daily limits. Finally, the permits may incorporate compliance schedules consistent with the provisions of the respective state water quality standards. However, in keeping with the timeline and intent of the *Chesapeake 2000*, generally, these compliance schedules in the permit and/or administrative order should require completion of construction by 2010.

EPA is committed to exploring a number of innovative approaches to permitting nutrients in the Bay and is specifically encouraging the use of watershed-based permitting and water quality trading. This approach is gaining support among the Bay states. With watershed-based NPDES permitting, a single NPDES permit is issued to cover multiple sources located within a defined geographic area. Such a permit, like any NPDES permit, would need limits as stringent as necessary to meet water

quality standards. Watershed permits combined with voluntary water quality trading programs are aimed at achieving new efficiencies and environmental results at reduced costs.

To complete the Action Plan, the CBP has convened a Blue Ribbon Finance Panel to seek funding to support the nutrient control actions that need to be taken by states and local municipalities. EPA is currently engaged in providing technical support for watershed-based permitting and water quality trading program development, and is exploring additional funding support to assist the states in developing these critical tools.

In conclusion, the Agency, in conjunction with our partner states, has been pursuing an Action Plan for reducing nutrients from point sources, which includes the Draft Permitting Approach described above and enclosed. In accordance with the Chesapeake Executive Council Directive and NPDES permitting regulations, EPA expects states to control nutrients via NPDES permits consistent with the requirements of the Clean Water Act and Federal regulations. I welcome your comments on the substantive points in this letter and the Draft Permitting Approach. These materials are being posted on EPA's website and distributed widely to invite public review and comment by September 15, 2004. Please contact Jon Capacasa at 215-814-5422 and/or Bob Koroncai at 215-814-5730 with your comments.

Sincerely,

/S/

Donald S. Welsh
Regional Administrator

Enclosures (2)
Draft Permitting Approach
Memo regarding Annual Permit Limits for N and P

cc: see attached list

Ms. Jane M. Kenny, Regional Administrator
EPA Region II

Mr. Benjamin Grumbles, Assistant Administrator
Office of Water
EPA Headquarters

Mr. Larry Lawson, Director
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VA Department of Environmental Quality

Mr. Robert M. Summers, Director
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MD Department of the Environment

Ms. Cathy Curran Myers, Deputy Secretary
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